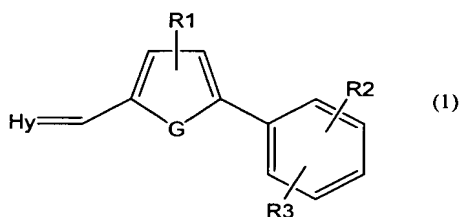


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) Use of A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers or increasing the density of keratinous fibers in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprising comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the said heterocycle optionally being substituted by at least one substituent ~~chosen~~ selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', or NRSO₂R' groups, saturated linear or branched C₁-C₂₀ alkyl radicals, ~~or~~ unsaturated and linear or branched C₁-C₂₀ alkyl radicals, ~~or~~ and saturated or unsaturated rings of 4 to 7 atoms

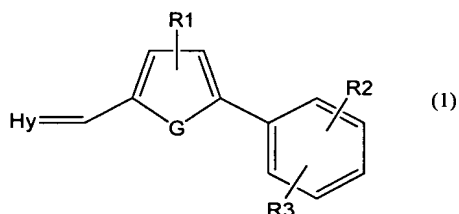
optionally comprising at least one heteroatom, ~~it being possible for these~~ wherein
~~the rings to be~~ are separate or fused, ~~it being possible for further wherein~~ the alkyl
radicals and the rings, ~~in addition, to be~~ are optionally substituted, where R, R', R"
and R', which are identical or different, denote a hydrogen, a linear or branched
C₁-C₂₀ alkyl radical or an aryl radical, ~~which~~ wherein the alkyl or aryl radical is
optionally substituted;

- G represents O, S or NH;

- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an
OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀",
NR₀C(=NR₀')NR₀"R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀',
NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀'
or NR₀SO₂R₀' group, a saturated ~~or unsaturated~~ and linear or branched C₁-C₂₀
alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one
saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one
heteroatom, ~~it being possible for~~ wherein the rings ~~to be~~ are separate or fused, it
~~being possible for further wherein~~ the alkyl radicals and the rings, ~~in addition, to~~ are
optionally be substituted, where R₀, R₀', R₀" and R₀', which are identical or different,
denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,
~~which~~ wherein the alkyl or aryl radical is optionally substituted ;

~~as agent for inducing and/or stimulating the growth of keratinous fibres, in particular
human keratinous fibres, and/or slowing down their loss and/or increasing their
density.~~

2. (Currently amended) Cosmetic-use of A method of caring for human keratinous fibers, or inducing and/or stimulating the growth of human keratinous fibers, or slowing the loss of human keratinous fibers and/or increasing the density of human keratinous fibers and/or treating androgenic alopecia in a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprising comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the said heterocycle optionally being substituted by at least one substituent chosen selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', or NRSO₂R' groups, saturated linear or branched C₁-C₂₀ alkyl radicals, or unsaturated and linear or branched C₁-C₂₀ alkyl radicals, or and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, it being possible for these wherein the rings to be are separate or fused, it being possible for further wherein the alkyl radicals and the rings, in addition, to be are optionally substituted, where R, R', R'' and R', which are identical or different, denote a hydrogen, a linear or branched

C₁-C₂₀ alkyl radical or an aryl radical, which wherein the alkyl or aryl radical is
optionally substituted;

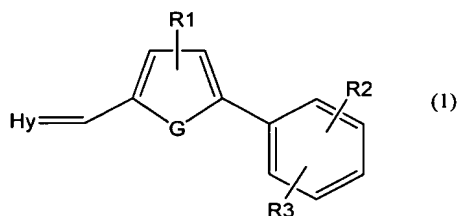
- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀", NR₀C(=NR₀')NR₀"R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated ~~or unsaturated~~ and linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, ~~it being possible for~~ wherein the rings ~~to be~~ are separate or fused, ~~it being possible for further wherein~~ the alkyl radicals and the rings, ~~in addition, to be~~ are optionally substituted, where R₀, R₀', R₀" and R₀' which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, which wherein the alkyl or aryl radical is optionally substituted. ;

~~in a cosmetic composition for caring for and/or making up human keratinous fibres in order to induce and/or stimulate their growth, to slow down their loss and/or to increase their density and/or to treat androgenic alopecia.~~

3. (Cancelled)

4. (Currently amended) Use of A method of inhibiting

15-hydroxyprostaglandin dehydrogenase in a subject in need of same, said method comprising applying to said subject a composition comprising an effective amount of
at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

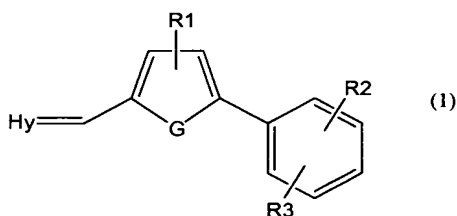
- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally ~~comprising~~ comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the ~~said~~ heterocycle optionally being substituted by at least one substituent ~~chosen~~ selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNR'R', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', or NRSO₂R' groups, saturated linear or branched C₁-C₂₀ alkyl radicals, ~~or~~ unsaturated and linear or branched C₁-C₂₀ alkyl radicals, ~~or~~ and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, ~~it being possible for these~~ wherein the rings to be are separate or fused, ~~it being possible for further~~ wherein the alkyl radicals and the rings, ~~in addition, to be~~ are optionally substituted, where R, R', R'' and R' which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, which wherein the alkyl or aryl radical is optionally substituted;
- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', NR₀C(=NR₀')NR₀'R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀'', COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀'

or $\text{NR}_0\text{SO}_2\text{R}_0'$ group, a saturated ~~or unsaturated and~~ linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, an unsaturated linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, ~~it being possible for wherein the rings to be~~ are separate or fused, ~~it being possible for further wherein the alkyl radicals and the rings, in addition, to be~~ are optionally substituted, where R_0 , R_0' , R_0'' and R_0' , which are identical or different, denote a hydrogen, a linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical or an aryl radical, ~~which wherein the alkyl or aryl radical is optionally substituted;~~ ; as inhibitor of 15-hydroxyprostaglandin dehydrogenase, ~~in particular human 15-hydroxyprostaglandin dehydrogenase.~~

5. (Canceled)

6. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein the keratinous fibers are the hair, eyebrows, eyelashes, beard hairs, moustache hairs and pubic hairs.

7. (Currently amended) ~~Use of~~ A method of reducing hair loss and/or increasing hair density and/or treating androchronogenetic alopecia and/or treating alopecia of natural origin in a subject in need of same; said method comprising applying to said subject a cosmetic or pharmaceutical composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

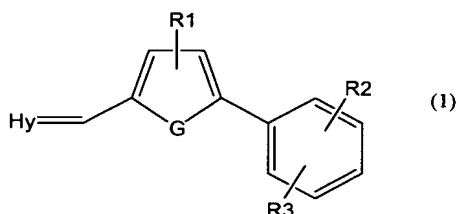
- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally ~~comprising~~ comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the said heterocycle optionally being substituted by at least one substituent ~~chosen~~ selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR'₁ or NRSO₂R' groups, saturated linear or branched C₁-C₂₀ alkyl radicals, ~~or unsaturated and linear or branched C₁-C₂₀ alkyl radicals~~, or and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, ~~it being possible for these~~ wherein the rings to be are separate or fused, ~~it being possible for further~~ wherein the alkyl radicals and the rings, ~~in addition, to be~~ are optionally substituted, where R, R', R'' and R', which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, which wherein the alkyl or aryl radical is optionally substituted;
- G represents O, S or NH;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', NR₀C(=NR₀')NR₀'R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀'', COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated ~~or unsaturated and~~ linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, ~~it being possible for~~ wherein the rings ~~to be~~ are separate or fused, it

~~being possible for further wherein~~ the alkyl radicals and the rings, ~~in addition, to be~~
~~are optionally~~ substituted, where R_0 , R_0' , R_0'' and R_0' , which are identical or
different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl
radical, ~~which wherein the alkyl or aryl radical~~ is optionally substituted. ;

~~in a cosmetic composition for human hair care in order to reduce hair loss and/or to~~
~~increase hair density and/or to treat androchronogenetic alopecia and/or to treat~~
~~alopecia of natural origin.~~

8. (Canceled)

9. (Currently amended) Use of A method of inducing and/or
stimulating the growth of eyelashes and/or increasing the density of eyelashes in a
subject in need of same; said method comprising applying to said subject a cosmetic
composition comprising an effective amount at least one heterocyclic compound of
formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle
optionally ~~comprising~~ comprises at least one carbonyl functional group and/or one
thiocarbonyl functional group, the said heterocycle optionally being substituted by
at least one substituent ~~chosen~~ selected from the group consisting of a halogen,
OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'',
NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR,
CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', or NRSO₂R' groups, saturated

~~linear or branched C₁-C₂₀ alkyl radicals, or unsaturated and linear or branched~~
C₁-C₂₀ alkyl radicals, ~~or~~ and saturated or unsaturated rings of 4 to 7 atoms
optionally comprising at least one heteroatom, ~~it being possible for these wherein~~
~~the rings to be~~ are separate or fused, ~~it being possible for further wherein~~ the alkyl
radicals and the rings, ~~in addition, to~~ are optionally be substituted, where R, R', R"
and R', which are identical or different, denote a hydrogen, a linear or branched
C₁-C₂₀ alkyl radical or an aryl radical, which wherein the alkyl or aryl radical is
optionally substituted;

- G represents O, S or NH;

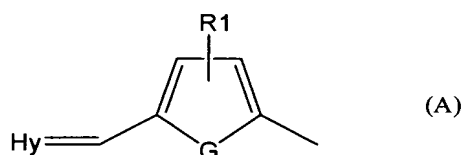
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an
OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀",
NR₀C(=NR₀')NR₀"R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀',
NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀'
or NR₀SO₂R₀' group, a saturated ~~or unsaturated and~~ linear or branched C₁-C₂₀
alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one
saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one
heteroatom, ~~it being possible for wherein~~ the rings ~~to be~~ are separate or fused, ~~it~~
~~being possible for further wherein~~ the alkyl radicals and the rings, ~~in addition, to be~~
are optionally substituted, where R₀, R₀', R₀" and R₀', which are identical or
different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl
radical, which wherein the alkyl or aryl radical is optionally substituted. ;

~~in a cosmetic composition for caring for and/or for making up human eyelashes for~~
~~inducing and/or stimulating the growth of the eyelashes and/or increasing their~~
~~density.~~

10. (Canceled)

11. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein in the compound of formula (I), the heteroatom or heteroatoms of Hy are chosen selected from the group consisting of O, N or S.

12. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein in the compound of formula (I), R₂ and R₃ are in the para- or meta-position with regard to the following part A:



13. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein in the compound of formula (I), R₁ represents a hydrogen atom.

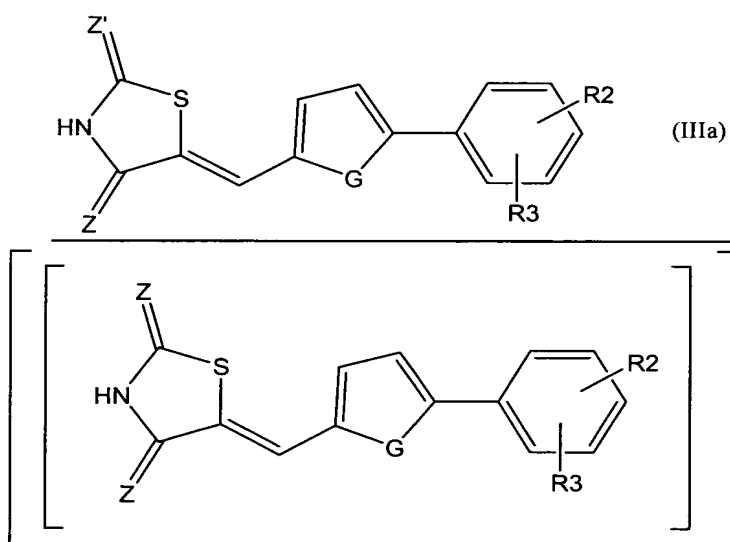
14. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein in the compound of formula (I), at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₂₀[[,]] ~~better still~~ C₄-C₄₀, alkyl radical.

15. (Currently amended) ~~Use according to the preceding claim characterized in that~~ The method of claim 14, wherein in the compound of formula (I), COOR₀ represents COOH or COOCH₂-CH₃.

16. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein in the compound of formula (I), R₂ represents COOH and R₃ represents H; R₂ represents COOCH₂-CH₃ and R₃ represents H; or R₂ and R₃ represent CF₃ or OCH₃.

17. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein the compound of formula (I) comprises one or two carbonyl groups, wherein the carbon of the carbonyl ~~which~~ groups forms part of the heterocycle.

18. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1 wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



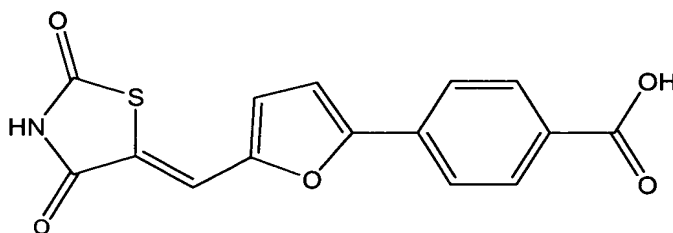
in which Z, Z' and G independently represent O or S; and at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₂₀~~[[,]] better still C₄-C₄₀~~ alkyl radical.

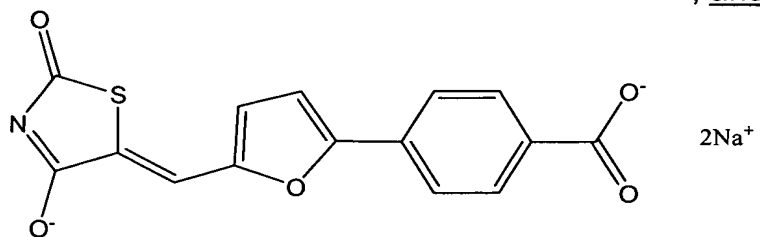
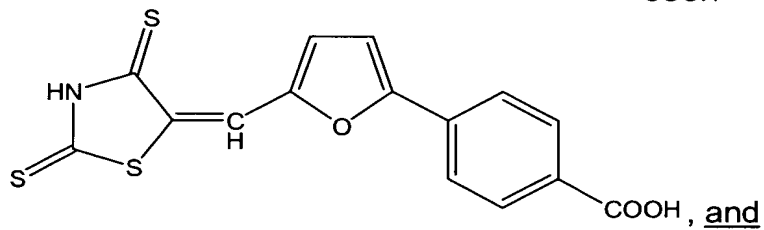
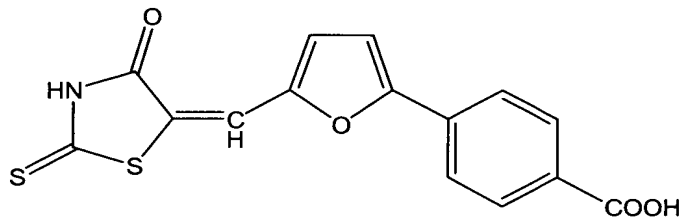
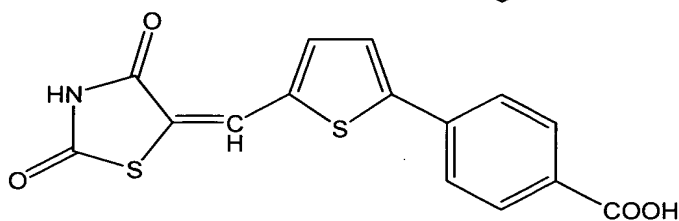
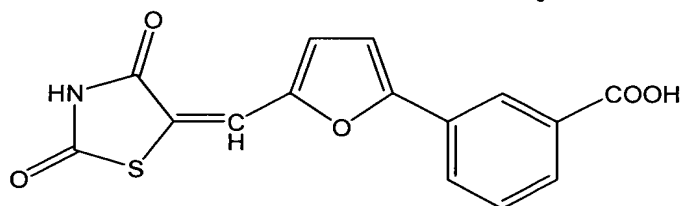
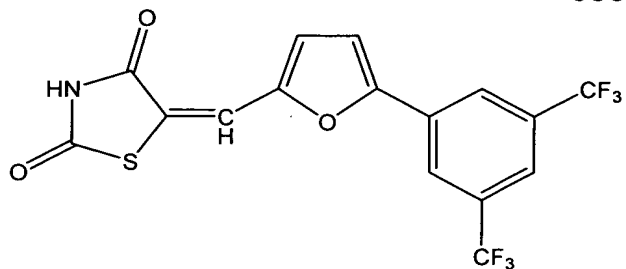
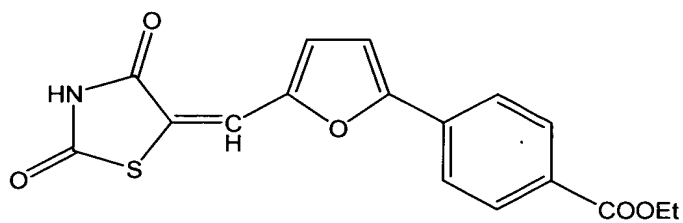
19. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1 wherein the compound of formula (I) comprises a thiazolidinedione ring.

20. (Currently amended) ~~Use according to~~ The method of Claim 18, characterized in that, ~~wherein,~~ when $Z = Z' = G$, at least one of the R_2 and R_3 groups represents CF_3 or $COOR_0$ with R_0 being a saturated, linear or branched, C_1 - C_{10} alkyl radical, ~~better still C_4 - C_6 , alkyl radical;~~ or, ~~when $Z = Z'$ and are different from G ,~~ at least one of the R_2 and R_3 groups represents CF_3 or $COOR_0$ with R_0 being H.

21. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein the salt of the compound of formula (I) is a salt ~~chosen~~ selected from the group consisting of sodium salts, potassium salts, salts of zinc (Zn^{2+}), of calcium (Ca^{2+}), of copper (Cu^{2+}), of iron (Fe^{2+}), of strontium (Sr^{2+}), of magnesium (Mg^{2+}), of manganese (Mn^{2+}), or of ammonium, triethanolamine, monoethanolamine, diethanolamine, hexadecylamine, N,N,N',N'-tetrakis(2-hydroxypropyl)ethylenediamine, or tris(hydroxymethyl)aminomethane salts, or hydroxides, carbonates, halides, sulphates, phosphates and or nitrates.

22. (Currently amended) ~~Use according to one of the preceding claims, characterized in that~~ The method of claim 1, wherein the compound of formula (I) is ~~chosen~~ selected from the group consisting of:





2Na⁺

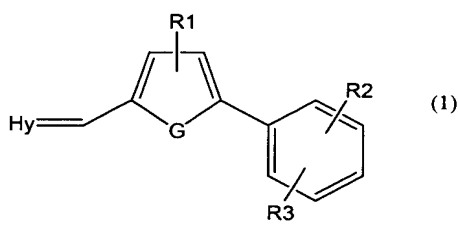
23. ~~(Currently amended) Use according to one of the preceding~~
~~claims, characterized in that~~ The method of claim 1 wherein the compound of
formula (I) or a mixture of compounds of formula (I) is used at a concentration
ranging from 10^{-3} to 10%, ~~preferably from 10^{-2} to 2%~~, with respect to the total weight
of the composition.

24. ~~(Currently amended) Use according to one of Claims 2 to 23,~~
~~characterized in that~~ The method of claim 1, wherein the composition is a
~~composition for topical application~~ applied topically.

25.-47. (Canceled)

48. ~~(Currently amended) Process for~~ A method for the cosmetic
treatment of keratinous fibers and/or of the skin from where the said fibers emerge in
a subject in need of same, said method comprising ~~characterized in that it consists in~~
applying, to the fibers and/or the skin of said subject, a cosmetic composition as
defined in ~~any one of Claims 25 to 47~~ Claim 1, in leaving this composition in contact
with the fibers and/or the skin and optionally ~~in rinsing~~, wherein the composition is a
cosmetic composition.

49. ~~(Currently amended) Process for the cosmetic care of and/or for~~
~~making up human eyelashes for the purpose of improving their condition and/or their~~
~~appearance, characterized in that it consists in~~ A method for improving the condition
and/or appearance of human eyelashes in a subject in need of same, said method
comprising applying[[,]] to the eyelashes and/or eyelids of said subject[[,]] a mascara
composition comprising at least one compound of formula (I) or one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRC SR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₁-C₂₀ alkyl radicals, unsaturated linear or branched C₁-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R, R', R'' and R' which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;

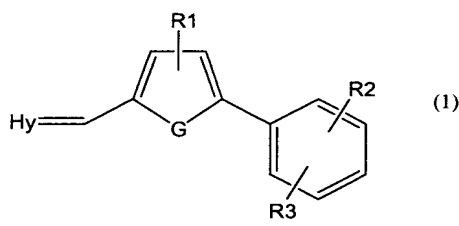
- G represents O, S or NH;

- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', NR₀C(=NR₀')NR₀'R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀'', COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or

unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom,
wherein the rings are separate or fused, further wherein the alkyl radicals and the
rings are optionally substituted, where R_0 , R_0' , R_0'' and R_0' , which are identical or
different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl
radical, wherein the alkyl or aryl radical is optionally substituted,

and in leaving this composition in contact with the eyelashes and/or eyelids.

50. (Currently amended) ~~Process for the cosmetic care of human hair and/or the human scalp for the purpose of improving their condition and/or their appearance, characterized in that it consists in~~ A method for improving the condition and/or appearance of human scalp in a subject in need of same, said method comprising applying[[,]] to the hair and/or the scalp of said subject[[,]] a cosmetic composition comprising an effective amount of at least one compound of formula (I) or one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle
optionally comprises at least one carbonyl functional group and/or one thiocarbonyl
functional group, the heterocycle optionally being substituted by at least one
substituent selected from the group consisting of a halogen, OR, SR, NRR' , COR,
CSR, $NRCONR'R''$, $C(=NR)R'$, $C(=NR)NR'R''$, $NRC(=NR')NR''R'$, OCOR, COSR,
SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF_3 , CN, $NRCOR'$,

SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₁-C₂₀ alkyl radicals, unsaturated linear or branched C₁-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R, R', R" and R', which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;

- G represents O, S or NH;

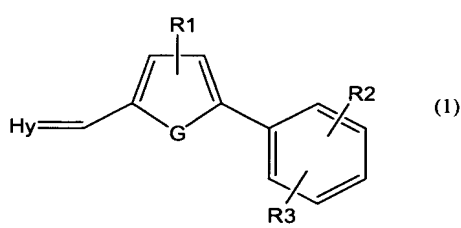
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀", C(=NR₀)R₀', C(=NR₀)NR₀'R₀", NR₀C(=NR₀')NR₀"R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀', NR₀CSNR₀'R₀", COOR₀, CONR₀R₀', CF₃, NO₂, CN, NR₀COR₀', SO₂R₀', SO₂NR₀R₀' or NR₀SO₂R₀' group, a saturated linear or branched C₁-C₂₀ alkyl radical, an unsaturated linear or branched C₁-C₂₀ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R₀, R₀', R₀" and R₀', which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted,

in and leaving this composition in contact with the hair and/or the scalp and optionally in rinsing the hair and/or the scalp.

51.-57. (Canceled)

58. (Currently amended) ~~Cosmetic use of~~ A method of preserving the amount and/or the activity of prostaglandins in the hair follicle in a subject in

need of same, said method comprising applying to the skin and/or hair of said
subject a cosmetic composition comprising an effective amount of at least one
heterocyclic compound of formula (I) or of one of its salts, in a cosmetic composition
as agent for preserving the amount and/or the activity of prostaglandins in the hair
follicle



in which:

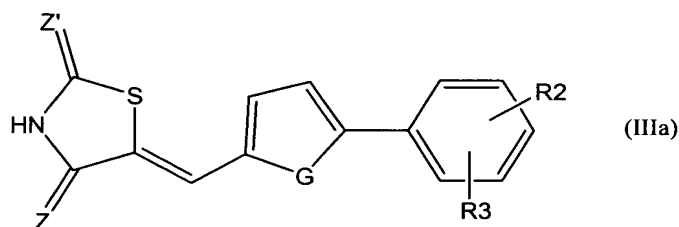
- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle
optionally comprises at least one carbonyl functional group and/or one thiocarbonyl
functional group, the heterocycle optionally being substituted by at least one
substituent selected from the group consisting of a halogen, OR, SR, NRR', COR,
CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR,
SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR',
SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₁-C₂₀ alkyl radicals,
unsaturated linear or branched C₁-C₂₀ alkyl radicals, and saturated or unsaturated
rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the
rings are separate or fused, further wherein the alkyl radicals and the rings are
optionally substituted, where R, R', R'' and R', which are identical or different,
denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical,
wherein the alkyl or aryl radical is optionally substituted;
- G represents O, S or NH;

- R_1 , R_2 and R_3 represent, independently of one another, a hydrogen, a halogen, an OR_0 , SR_0 , NR_0R_0' , COR_0 , CSR_0 , $NR_0CONR_0'R_0''$, $C(=NR_0)R_0'$, $C(=NR_0)NR_0'R_0''$, $NR_0C(=NR_0')NR_0''R_0'$, $OCOR_0$, $COSR_0$, $SCOR_0$, $CSNR_0R_0'$, NR_0CSR_0' , $NR_0CSNR_0'R_0''$, $COOR_0$, $CONR_0R_0'$, CF_3 , NO_2 , CN , NR_0COR_0' , SO_2R_0' , $SO_2NR_0R_0'$ or $NR_0SO_2R_0'$ group, a saturated linear or branched C_1 - C_{20} alkyl radical, an unsaturated linear or branched C_1 - C_{20} alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R_0 , R_0' , R_0'' and R_0' , which are identical or different, denote a hydrogen, a linear or branched C_1 - C_{20} alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted,

59. (Canceled)

60. (New) The method of claim 1, wherein in the compound of formula (I), at least one of the R_2 and R_3 groups represents CF_3 , OR_0 or $COOR_0$ with R_0 being H or a saturated or unsaturated, linear or branched, C_1 - C_{10} alkyl radical.

61. (New) The method of claim 1 wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



in which Z and Z' independently represent O or S and G represents O; and at least one of the R₂ and R₃ groups represents CF₃, OR₀ or COOR₀ with R₀ being H or a saturated or unsaturated, linear or branched, C₁-C₁₀, alkyl radical.

62. (New) The method of Claim 18, wherein, when Z = Z' = G, at least one of the R₂ and R₃ groups represents CF₃ or COOR₀ with R₀ being a saturated, linear or branched, C₁-C₅, alkyl radical.

63. (New) The method of Claim 18, wherein, when Z = Z' and Z and Z' are different from G, at least one of the R₂ and R₃ groups represents CF₃ or COOR₀, with R₀ being H.

64. (New) The method of claim 1 wherein the compound of formula (I) or a mixture of compounds of formula (I) is used at a concentration ranging from 10⁻² to 2%, with respect to the total weight of the composition.

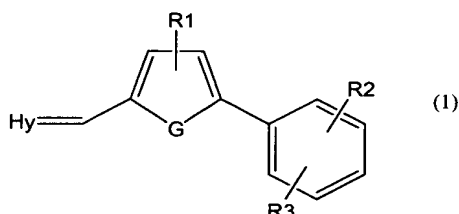
65. (New) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of antiandrogens, cyclosporins and their analogues, antimicrobials, antifungals, anti-inflammatories and retinoids.

66. (New) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of aminexil, FP receptor agonists and vasodilators.

67. (New) The method of claim 1, wherein the composition further comprises at least one compound selected from the group consisting of aminexil, minoxidil, latanoprost, butaprost and travoprost.

68. (New) A method of inducing the growth of keratinous fibers, or stimulating the growth of keratinous fibers, or slowing the loss of keratinous fibers in

a subject in need of same; said method comprising applying to said subject a composition comprising an effective amount of at least one heterocyclic compound of formula (I) or of one of its salts,



in which:

- Hy represents a heterocycle with 4, 5, 6 or 7 atoms wherein the heterocycle optionally comprises at least one carbonyl functional group and/or one thiocarbonyl functional group, the heterocycle optionally being substituted by at least one substituent selected from the group consisting of a halogen, OR, SR, NRR', COR, CSR, NRCONR'R'', C(=NR)R', C(=NR)NR'R'', NRC(=NR')NR''R', OCOR, COSR, SCOR, CSNRR', NRCSR', NRCSNR'R'', COOR, CONRR', CF₃, CN, NRCOR', SO₂R', SO₂NRR', NRSO₂R', saturated linear or branched C₁-C₂₀ alkyl radicals, unsaturated linear or branched C₁-C₂₀ alkyl radicals, and saturated or unsaturated rings of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R, R', R'' and R' which are identical or different, denote a hydrogen, a linear or branched C₁-C₂₀ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted;
- G represents O;
- R₁, R₂ and R₃ represent, independently of one another, a hydrogen, a halogen, an OR₀, SR₀, NR₀R₀', COR₀, CSR₀, NR₀CONR₀'R₀'', C(=NR₀)R₀', C(=NR₀)NR₀'R₀'', NR₀C(=NR₀')NR₀'R₀', OCOR₀, COSR₀, SCOR₀, CSNR₀R₀', NR₀CSR₀,

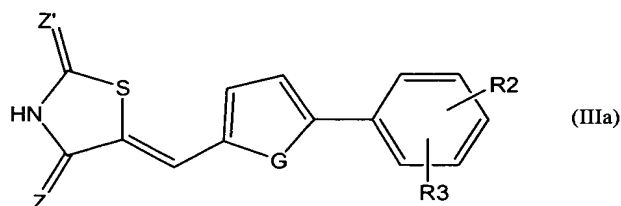
$\text{NR}_0\text{CSNR}_0'\text{R}_0''$, COOR_0 , $\text{CONR}_0\text{R}_0'$, CF_3 , NO_2 , CN , $\text{NR}_0\text{COR}_0'$, $\text{SO}_2\text{R}_0'$, $\text{SO}_2\text{NR}_0\text{R}_0'$ or $\text{NR}_0\text{SO}_2\text{R}_0'$ group, a saturated linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, an unsaturated linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical, or at least one saturated or unsaturated ring of 4 to 7 atoms optionally comprising at least one heteroatom, wherein the rings are separate or fused, further wherein the alkyl radicals and the rings are optionally substituted, where R_0 , R_0' , R_0'' and R_0' which are identical or different, denote a hydrogen, a linear or branched $\text{C}_1\text{-C}_{20}$ alkyl radical or an aryl radical, wherein the alkyl or aryl radical is optionally substituted.

69. (New) The method of claim 68, wherein the keratinous fibers are the hair, eyebrows, eyelashes, beard hairs, moustache hairs and pubic hairs.

70. (New) The method of claim 68, wherein the keratinous fibers are the hair.

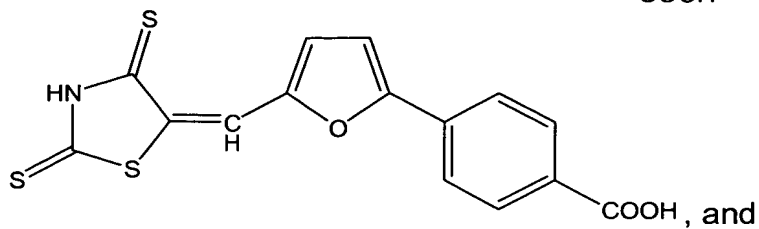
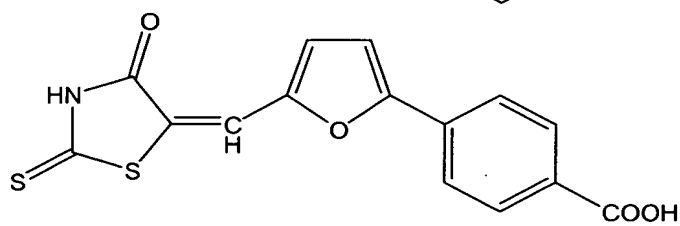
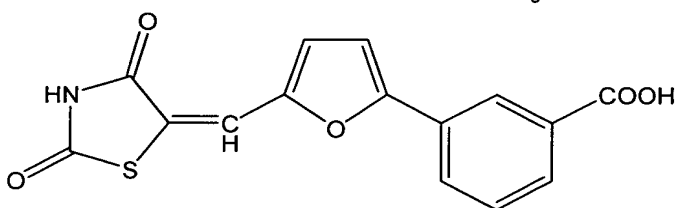
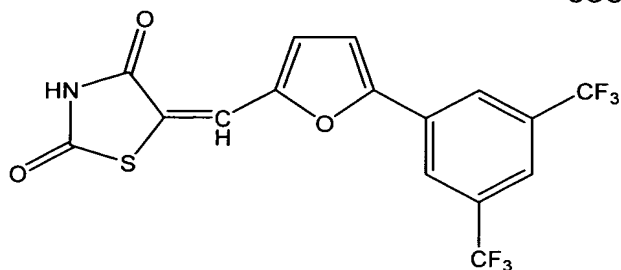
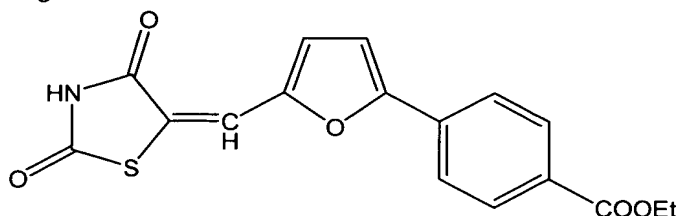
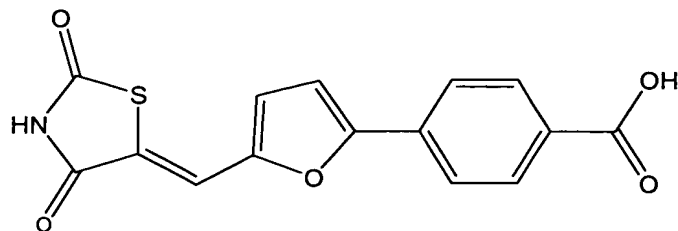
71. (New) The method of claim 68, wherein the application of the composition is topical.

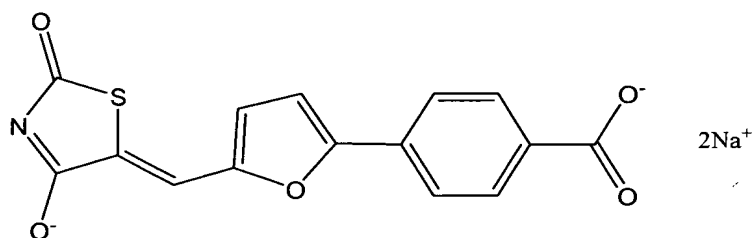
72. (New) The method of claim 70, wherein the heterocyclic compound of formula (I) exhibits the following formula (IIIa) or the corresponding salt form:



in which Z and Z' independently represent O or S and G represents O ; and at least one of the R_2 and R_3 groups represents CF_3 , OR_0 or COOR_0 with R_0 being H or a saturated or unsaturated, linear or branched, $\text{C}_1\text{-C}_{10}$, alkyl radical.

73. (New) The method of claim 70, wherein the heterocyclic compound of formula (I) is selected from the group consisting of:





74. (New) The method of claim 70, wherein the heterocyclic compound of formula (I) is:

